Exercise 1 — Federal Vote: Universal Basic Income (9 points)

Parse the XML-file $exam\_data.xml$ and compute the aggregated relative yes, no, and empty votes at cantonal level. The data contains information on the voting behavior of a random sample of eligible voters in the federal vote of June 05, 2016 (Universal Basic Income). The variable $vote$ contains information about how the survey participant voted: "Ja"=yes vote, "Nein"=no vote, "Leer"=empty vote, and "missing"means the participant did not vote. Store your final result in a data frame which should look similar to the following table:

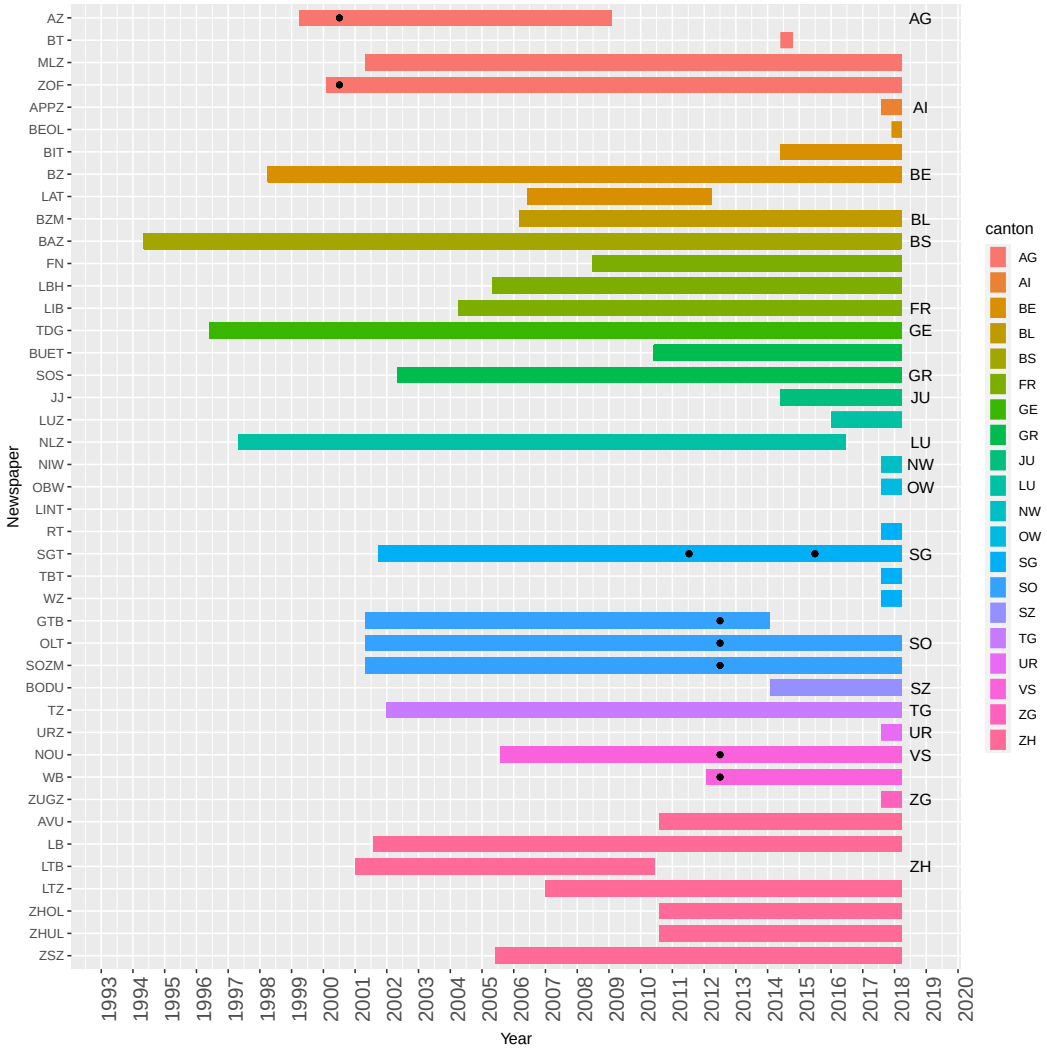
Canton	Yes	No	Empty
GL	100.00	0.00	0.00
NW	66.67	33.33	0.00
SH	62.50	37.50	0.00
BS	45.00	55.00	0.00
JU	38.46	46.15	15.38
ZG	36.36	63.64	0.00
NE	35.29	64.71	0.00
VS	35.14	64.86	0.00
GE	30.26	61.84	7.89
BE	29.13	70.87	0.00
ZH	27.85	70.89	1.27
FR	27.59	68.97	3.45
VD	27.34	70.31	2.34
TG	26.67	73.33	0.00
LU	26.19	73.81	0.00
BL	24.24	72.73	3.03
SZ	23.08	76.92	0.00
GR	21.43	71.43	7.14
SO	21.43	78.57	0.00
OW	20.00	80.00	0.00
TI	18.96	76.30	4.74
AG	18.00	82.00	0.00
SG	15.91	84.09	0.00
AI	0.00	100.00	0.00
AR	0.00	100.00	0.00
UR	0.00	100.00	0.00

The variables Yes, No, and $Empty$ represent the relative votes of all voters who cast a ballot ($Yes + No + Empty = 100$).

Exercise 2 — Newspaper Availability (11 points)

Use the data sets *newspaper.xlsx* and *concurrent_data.csv* to create a graph that contains information on concurrent elections and newspaper availability per canton. The graphic should look something like this:

Abbildung 1: Availability of Newspapers and Concurrent Elections



Note: The black points indicate a concurrent election.